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Editorial Index Page AUG 18 1924 vertisers' Index Page 44.

AMERICAN ARTISAN Hardware Record

Vol. 88. No. 7. 620 SOUTH MICHIGAN AVENUE, CHICAGO, AUGUST 16, 1924. \$2.00 Per Year.

THATCHER Furnaces

Overasof 12 years of Leade the in dir Warn diring Warn dustry Industry

And still Leading

because Thatcher makes only good furnaces furnaces that your customers will get good heating service from for many years.

because—We not only operate under a manufacturing policy that demands only first quality heaters of the highest type, but guarantee that each and every one is of sound quality and conatruction and correctly designed to produce perfect heating results.

because Thatcher produces a complete line and maintains a complete service for Thatcher agency holders.

because Thatcher's is an agency that you can stick to at all times.

because Thatcher prices are always conservative to enable our agency holders to make good profits.

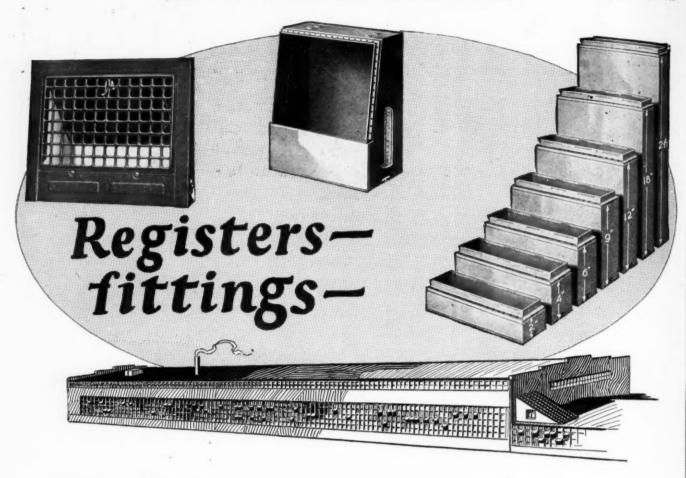
Write today for our catalogs and agency information



New Meteor

A FAVORITE in the Thatcher line. It is one of the biggest selling furnaces made. Its many improved features and excellent construction make it the highest type of Top Radiator furnace manufactured. Write for list of features and catalog giving full details.

THATCHER FURNACE CO., 341 N. Clark Street, CHICAGO, ILL. 133-135 W. 35th St., NEW YORK, N. Y. 39-41 St. Francis Street, NEWARK, N. J.



This 460 Foot Two Story Warehouse <u>Fully Stocked</u> for <u>Your Needs</u>

OW is the time to check up your stock of registers and fittings and anticipate your fall needs. By ordering now, you will protect yourself against a possible shortage—and installation delays—later on.

The reserve stocks carried in the 460 ft., two-story Mueller warehouse — devoted entirely to Mueller Registers and Fittings — are ample to meet practically any demand on short notice.

If you have never used the time-and-labor-saving Mueller stack "that builds itself", or Mueller russet-bronze registers (supplied in many other popular finishes, too) you will be agreeably surprised when you put in your first Mueller job. You can safely and profitably use Mueller Registers and Fittings, knowing none better can be secured. Write, wire, or phone us your requirements.

L. J. MUELLER FURNACE CO., 193 Reed Street, MILWAUKEE, WIS.

Makers of Warm Air, Steam, Vapor, and Hot Water Heating Systems, Registers, Pipe and Fittings

Warehouses: Baltimore Brooklyn Raleigh, N.C. Detroit St. Louis Minneapolis Salt Lake City Seattle

MUELLER FURNACES

easier to sell than to sell against

Published to Serve the Warm Air Furnace Sheet Metal, Stove and Hardware Interests

AMERICAN ARTISAN Hardware Record

Address all communications and remittances to AMERICAN ARTISAN AND HARDWARE RECORD 620 South Michigan Avenue CHICAGO, ILLINO'S

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THE CIRCULATION OF IDEAS

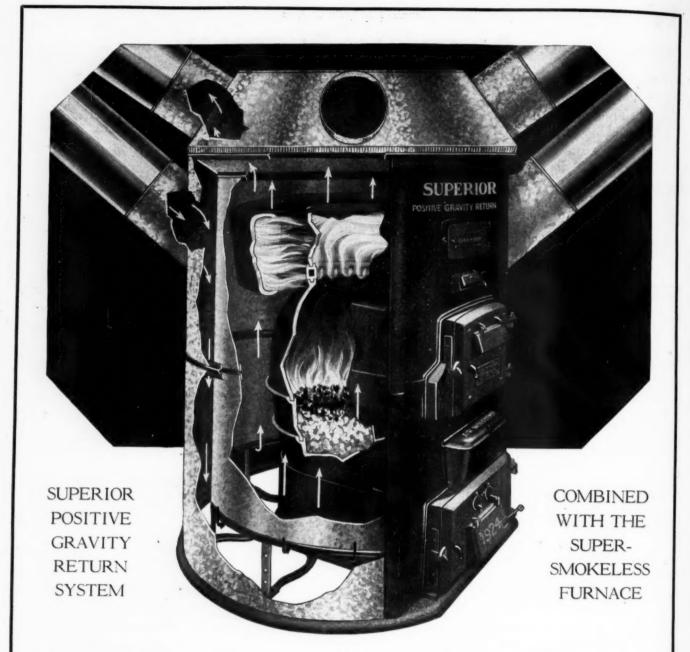
MAKING MEN proud of their work never cuts production or diminishes quality. But constant drain of their sense of fulfillment does that very thing.

YOU HAVE ONE excellent way to make your superintendent or your foreman or one or a group of your workmen proud of their work. The way is this:

SUPPOSE in your organization there has been solved one of the constant problems that always accompany construction. The problem may be nothing more than some new way of placing a machine so that production is increased. Or the problem may have been the expeditious repair of equipment. One hundred and one thousand possibilities present themselves.

NOW IF YOU will write the occurrence in a letter to the editor of AMERICAN ARTISAN AND HARDWARE RECORD and send a picture if possible, the event can be given publicity. It will be interesting to other contractors and their forces, and it will create a spirit in your own organization that will help wonderfully in getting results.

ALPHABETICAL INDEX AND CLASSIFIED LIST OF ADVERTISERS, Pages 44-46-48.



Something New in Warm Air Heating!

THE SUPERIOR Positive Gravity Return System brings a separate cold air return from every room, the cold air return exactly equalling the warm air supply, and this cold air, instead of entering the bottom of the casing, enters the top immediately under the warm air pipes at an angle of thirty degrees, the inner and outer casings being stopped off by an inverted cone. This baffle place compels the returning air to descend between inner and outer casings, insulating the inner casing so

that there is no loss of heat in the basement. No mechanical devices are used—only the time proven law of gravity. Nothing to complicate—nothing to confuse—nothing to get out of order. Wonderfully economical results have been obtained—coal bills cut down, heating efficiency materially increased. All the rooms are evenly warmed and the circulation is so positive and so uniform that the operating expense is greatly reduced and complete comfort assured even in violent weather.

UTICA HEATER COMPANY UTICA, N. Y.

CHICAGO BRANCH: 218-220 West Kinzie Street

Warm Air Furnace Industry Forges Ahead in Spite of Plentiful Barriers.



THE warm air furnace is gradually but surely pushing itself to the front as a factor of primary importance in rendering comfortable a dwelling house during the inclement season of the year. Although put through a long struggle with many forms of adversity, it is in a fair way to triumph at last. Public confidence is being won, and consequently the sale of warm air furnaces and supplies from now on will increase.

As everyone knows, the industry did not emerge from oblivion over night. Recognition was slow in coming. The public mind is, in addition to a natural inertia, bound by scepticism for anything constituting a change in the established order of things. It had to be educated into the advantages and proper use of a warm air furnace, in quite the same manner employed to teach people to sleep with their windows open at night.

In the August 2nd issue of American Artisan Frank H. Phegley has given a very descriptive outline of the industry's progress.

We must not, however, lose sight of the fact that there is still a great deal of work to be done. The installation of the furnace is still in the experimental stage. Installers have not as yet fully digested and accepted the national code. It will take some time and effort to push prejudice aside and to give the installer a thorough understanding of the code and its functions.

The whole-hearted assistance given the industry by the University of Illinois is a sign which augurs well for its advancement. It shows that men with scientific training and knowledge at their command believe that the furnace will come into general use, and are willing and anxious to give it their time and effort. The test house at Urbana, now being financed and erected by the warm air furnace

industry, carries proof positive of a sincere desire on the part of the three factors—manufacturer, university and installer—to work in unison.

The manufacturer and installer must now coöperate to use the knowledge uncovered by research to the best advantage. The line of communication between the experiment station and the completed installation must be open at all times. The installer must endeavor to inform himself on the latest data as evolved by the experiment station, and in this he is to be assisted by the manufacturer. On the other hand, the installer should advise the experiment station or the manufacturer of any untoward furnace performances coming ander his observation.

The warm air heating industry was founded upon a correct scientific principle. It has progressed since the day of its inception, in spite of fierce competition and lack of experience through the stage of the proverbial infant industry, but now the three factors must coördinate their efforts in such a way as to develop the best possible system for the consumer's use. The consumer is at the mercy of the men in the industry, and it is up to these men to see that the trust is not violated. When this is done there need be no fear about the inability of the installer to sell his installations.

The apparatus has been developed. It now only remains to effect an installation as nearly perfect as human intelligence and genius and experience can do it.

* * *

If you locate a prospect for a warm air heating installation you are more likely to make a better profit than if he seeks you out, for most likely he will then also seek others out, and that usually results in price competition.

Random Notes and Sketches. By Sidney Arnold

If you want to know who Charlie Holub is, and it will be well worth your while to make his acquaintance, just peruse the July Fitting Remarks of the W. E. Lamneck Company. It carries a resume of his life's activities which are exceedingly entertaining not to say instructive. We'll leave the rest for you and for Charlie to do.

While at the Chicago Retail Hardware Association picnic, I overheard the following conversation between Dave Zweifel and Fred Russell, city sales manager for Hibbard, Spencer, Bartlett & Company:

Dave: "I tell you, that new salesman we put on is a corker—he's got ideas!"

Fred: "What's he done?"

Dave: "He's sold that big lot of old-fashioned washing machines we had in the warehouse—the ones that work by hand, you know—just told the stout women who came in that the pretty girl he had showing them used this plan to reduce her weight."

Bob Kruse, who makes that good Kruse steel furnace, drove up from Indianapolis the other day to get a whiff of our famous lake breeze, and also combined a bit of business with pleasure. He had just closed a deal when I saw him sauntering down "Boul Mich," so he told me, and maybe that was why he looked so good-natured, or maybe it was because of the many fine ladies who were sharing the sidewalk with him.

A friend of mine took a young lady out to see the horse races at Hawthorne, which are supposed to be operated without betting (at least so far as the police and states' attorney appear to know).

Glancing over the program, she spied Lily M., saying: "I want to bet on her." Looking at the jockey board, my friend replied, "Lily M.

was scratched." "Poor thing," she sympathized, "I hope it wasn't serious and didn't hurt her."

E. F. Glore, treasurer of Abram Cox Stove Company, had an office boy who failed to give satisfaction, so he was discharged after a week's trial.

"Will you give me a character?" asked the boy.

Our friend decided that he would write a noncommittal letter. His effort resulted as follows:

"The bearer of this letter has worked for me one week, and I am satisfied."

Charlie Hauck, who has been running a big hardware and stove business in Springfield, Ohio, for many years, has a bit of humor in his make-up, and so he did not get "sore" when he received a big package of household utensils with this note enclosed:

"The enclosed articles have proved unsatisfactory to my wife, who, I regret to inform you, is very hard to please. I notice they are entirely as represented in the catalog and also just what was ordered, so it is no fault on your part. My wife is naturally very trying at times. Sometimes she does not know what she does want. I am thoroughly disgusted with the way my wife finds fault with things, especially when she receives exactly what she orders."

Editor Stowe of the Michigan Tradesman celebrated his forty-first birthday as the boss of that interesting and helpful publication on Wednesday, August 6th.

Nothing that I can say in appreciation and felicitation could be said half as well as Douglas Malloch did it in the following verses written for the occasion of Mr. Stowe's Anniversary Number:

Forty-one years is a long, long time!
Why, men grow old in forty-one years.

Men who never read much of rhyme Nor cared a lot about other men's tears.

But here is a thought that comes and cheers,

Sweet as a song by the angels sung: If our hopes are bright and our hearts are young,

What is a matter of forty-one years?

Forty-one years! There are men I know

Who forty-one years have kept a store,

And have watched men come and have watched them go

Like the endless waves on an endless shore.

What is a year, and, yes, two-score,

With the world to serve and your work to do?

It all seems little enough to you When you look on life from a merchant's door.

Forty-one years is a short, short while,

If getting something besides your gold—

Such deeds to do and such smiles to smile

There isn't much time to grow so old.

Forty-one years—but a year could hold

So many blessings, such busy days, Such good to do in so many ways, We never noticed the years that rolled.

Forty-one years—but another burns
Like a rising sun in a sky of blue.
Oh, a few grow old—but a wise man

To another year and its tasks to do.

Forty-one years—it may all be

But we've forgotten the year that's gone,

And we're looking up and we're looking on

And we're looking forward to forty-two!

Harris Brothers Finally Told the Truth in Their Heating Equipment Advertisement.

But it Took Them Three Weeks to Make Up Their Mind That it Had to Be Done.

IT IS not a pleasant thing to have to acknowledge that you have done wrong, but sometimes it is necessary to do so, and if it is done with good grace that is usually the last the wrong-doer hears of it.

But sometimes the guilty one tries to sidestep the admission and sometimes he tries to blame somebody else for his "mistake," and in both cases, usually he makes things so much worse for himself.

And so it was in the case of the advertising writer-excuse us-the "Director of Publicity" for Harris Brothers, Chicago, whose latest stunt was a series of full page advertisements in the Chicago Tribune, in which he made some startling claims about prices on "heating material."

Sections of these two advertisements were reproduced on pages 18 and 21 of our August 9th issue, together with certain information as to the true facts of the case, and are shown herewith in order that you may have a complete history of the case in one issue.

It will be remembered that the statement made in the first advertisement that came to our notice ran like this:

"On July 1st all manufacturers advanced their prices on heating material-but our prices remain at the same low level. Why? Because we prepared ourselves against price advances by purchasing large quantities of heating equipment last spring. Ample quantities of all heating materials are on hand for immediate delivery to July buyers. Buy now at prevailing low prices."

Inasmuch as we had not heard of any price advances on warm air furnaces or warm air furnace pipes and fittings, we were somewhat at a loss to understand the broad statement made by this "Director of Publicity" for Harris Brothers.

So we wrote to a number of manufacturers in these lines and asked them if they had advanced their

prices or had heard of any one who had advanced his prices.

Every one of them answered in

HEATING SYSTEMS

The prices shown are for a heating system of sufficient capacity to heat an ordinary five-room building, size 24x40 feet, with five rooms and bath.



water OF steam, square sectional boiler.



Single register warm air fur-

Hot Water System \$1.10 Down

Only \$22.00 Per Month for 10 Months Cash (2010)

Steam System \$95 Down Only \$20.00 Per Month for 10 Months Cosh 275

\$275 Price,

Direct Pipe Warm Air System \$45 Down

Only \$10.00 Per Month for 10 Months Cash \$135 Price, This price does not include cost of installation.

Single Register Warm Air System \$35 Down

Only \$7.00 Per Month for 10 Months



Hot water or steam, round sectional boiler.



Direct pipe warm air fur-

We Now Install Warm Air Systems!

We are now prepared to furnish every needed item for warm air heating systems, and install the plant complete in new or old build-ing, ready for you to build the fire. Our estimators will call and figure your requirements.

On July first, all manufacturers advanced their prices on heating material—BUT OUR PRICES REMAIN AT THE SAME LOW LEVEL! Why? Because we prepared ourselves against price advances by purchasing large quantities of heating equipment last spring. Ample quantities of all beating materials are on hand for immediate delivery to July buyers. Buy now at prevailing low prices.

Buy Your Heating System Now and Take a Year's Time to Pay

Figure 1.-Original Section of Harris Brothers' Advertisement in Which Untrue Statement as to Prices Was Made.

the negative:

No advances had been made on furnaces, registers, cold air faces, pipes or fittings. Then we wrote to the advertising manager of the *Chicago Tribune*, E. W. Parsons, explaining to him that a serious misstatement had

been made in the advertisement of Harris Brothers which appeared in the July 20th issue of the *Tribune*, the Sunday edition which has a very large circulation, both in Chicago and in the middle west.

Our letter to Mr. Parsons read as follows:

"In the July 20th issue of the Chicago Sunday Tribune there appeared a full page advertisement of Harris Brothers in which the following statement was made:

"'On July 1st all manufacturers advanced their prices on heating material.'

"We have on file letters from twenty-five manufacturers of boilers, warm air furnaces and other heating material, many of whom are among the largest in the field, and all of whom make the positive assertion that their prices are no higher now than they were on January 1st of this year, with the exception of boilers on which there is a seasonable change in the discount which, however, is not regarded as an 'advance' in the usual sense of that term, nor is this discount change universally adopted by the boiler manufacturers.

"We realize, of course, that it is out of the question for your department to censor your advertising colums to the extent that you can exclude every erroneous and misleading advertisement, but in view of the facts presented in the foregoing we feel certain that you will call this matter to the attention of Harris Brothers and impress upon that company the advisability of telling the truth in their advertisements, and also that you will refuse to publish any advertisements for them or anybody else containing similar untrue statements.

"Among the manufacturers from whom we have letters on this subject are some, who, in the recent months, have used large space in your publication. You certainly would not willingly publish something that was not true and which would have a tendency to harm any of your advertisers.

"We shall be glad to have your prompt reply to this letter in order

HEATING SYSTEMS

Buy Yours Now and Take a Year's Time to Pay

All you need is one-third of the price of your heating plant—take a year's time to pay the balance. Protect yourself against higher prices by placing your order now for future delivery if you wish. Our expert engineers will help you solve your heating problems and supply you with blue prints and complete instructions for installation. All necessary tools furnished at a very low rental charge.

We Now Install Warm Air Systems!

We are now prepared to furnish every needed item for warm air heating systems, and install the plant complete in new or old buildings, ready for you to build the fire. Our estimators will call and figure your requirements.

On July first, leading manufacturers advanced their prices on heating material—BUT OUR PRICES REMAIN AT THE SAME LOW LEVEL! Why? Because we prepared ourselves against price advances by purchasing large quantities of heating equipment last spring. Ample quantities of all heating materials are on hand for immediate delivery. Buy now at prevailing low prices.

The prices shown are for a heating system of sufficient capacity to heat an ordinary five-room building, size 24x40 feet, with five-rooms and bath.



Hot water or steam, square sectional boiler.



Single register warm air fur-

Hot Water System \$110 Down

Cnly \$22.00 Per Month for 10 Months Cash Price. \$310

\$95 Down
Only \$20.00 Per Month
for 10 Months
Cysh
Price. \$275

Direct Pipe
Warm Air System
\$45 Down
Only \$18.00 Per Months
for 10 Months
Cash \$135
Price,
This price does not include
cost of installation.

Single Register
Warm Air System
\$35 Down
Only \$7.00 Per Month
for 10 Months
Cash
Price.
\$98



Hot water or steam, round sectional boiler.



Direct pipe warm air furnace,

Figure 2.—How Director of Publicity Tried to Sidestep. His "Correction" Failed to Correct Former Misstatement.

that we may satisfy our friends and your friends that your department is innocent in this very flagrant case of misrepresentation."

Mr. Parsons was short and noncommittal:

"To AMERICAN ARTISAN:

"I am in receipt of your letter of even date and am taking the matter up with Harris Brothers.

* * *

As a result, we suppose, of Mr. Parsons "taking the matter up with Harris Brothers," the advertisement, which appeared in the August 2nd issue of the *Tribune*, contained a section which is reproduced herewith, in Figure 2.

It will be noted that some transposition has been made in the arrangement of the reading matter and cuts, and also that the statement to which we called Mr. Parsons' attention has been slightly changed.

But-and here is where Mr. "Director of Publicity" tried to sidestep-the change from "all" to "the leading" did in no sense change the idea that our friend, the "Director of Publicity" intended to convey: That generally speaking, prices on heating material (warm air furnaces, registers, pipes and fittings included) had been advanced by the manufacturers, and that, therefore, the unfortunate consumer would have to pay a higher price unless he bought from Harris Brothers (or from some other "foresighted" source of supply).

So we wrote two more letters.

One was to Mr. Parsons, as fol-

lows:

"Referring to your letter of August 1st, in regard to the full page advertisement of Harris Brothers, which appeared in your July 20th issue, I desire to call your attention to the advertisement which was run in your August 3rd issue by the same concern.

"You will note that an unimportant change has been made in the paragraph quoted in my former letter, so that it now reads:

"'On July 1st leading manufacturers advanced their prices on heating material......' "Inasmuch as this paragraph follows immediately one pertaining to warm air furnaces, the natural in-

ference of the average reader would be that these price advances were also made on warm air furnaces,

HEATING SYSTEMS

Buy Now! Take A Year to Pay!

On July first, leading manufacturers of boilers and radiation advanced their prices on heating material—BUT OUR PRICES REMAIN AT THE SAME LOW LEVEL! Why? Because we prepared ourselves against price advances by purchasing large quantities of heating equipment last spring. Ample quantities of all heating materials are on hand for immediate delivery. Buy now at prevailing low prices.

Liberal Time One-third down Payment Plan monthly installments within a year.

Free Expert
Engineering
Service
Service
rooms and we will give you a complete estimate.

Give us the plans of your building or a rough sketch showing size and location of rooms and we will give you a

Tools Furnished For
Installation
who can handle tools can do a perfect job. All necessary tools will
be furnished.

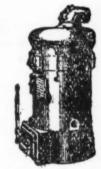
Our Heating to heat your building satisfactorily in the coldest weather without forcing the fire. All material guaranteed, brand new and of the finest quality.

MATERIAL DELIVERED WHEN YOU WANT IT The prices shown are for a heating system of sufficient capacity to heat an ordinary five-room building, size 24x40 feet, with five rooms and bath.



Hot water or steam, square sectional boiler. \$110 Down
Only \$22.00 Per Month
for 19 Months
Cash \$310

Steam System \$95 Down Only \$25,00 Per Month for 10 Months Cash \$27.75



Hot water or steam, round sectional boiler.

We Now Install Warm Air Systems!

Price.

We are now prepared to furnish every needed item for warm air heating systems, and install the plant complete in new or old buildings, ready for you to build the fire. Our estimators will call and figure your requirements.



Single register warm air fur-

Direct Pipe
Warm Air System
\$45 Down
Only \$10.00 Per Month
for 10 Months
Cash
Price, \$135
This price does not include
cost of installation.

Single Register
Warm Air System
\$35 Down
Only \$7.00 Per Month
for 10 Months
Cash
Price.
\$98



Direct pipe warm air furnace.

Figure 3.—Here We Have His Third Effort. As You Will Note, He Kept His Promise to Us and Kept Fairly Well to the Truth.

which, you know, by this time, is not true.

"I suppose that the slight change in the wording is the result of your taking the matter up with Harris Brothers in accordance with your letter of August 1st, but upon serious consideration, I am quite sure that you will agree that the paragraph is still of a misleading nature.

"Concerns like Harris Brothers appear to go on the principle that because of their size any statement made by them will be regarded as truthful by a sufficiently large number of people who rely upon the reputation which the *Chicago Tribune* caims to have established—that misleading and untruthful advertisements are not allowed in its columns.

"Such a reputation is not likely to be maintained by the *Chicago Trib*une if you continue to allow advertisements such as the two which we have called to your attention to be published in your paper,

"It is only fair to state that considerable space will be devoted to this matter in the next issue of American Artisan, and that your reply to this letter, as well as your reply to our first letter to you, will be a part of the article, which we now have in course of preparation."

So far, no reply has been received from Mr. Parsons.

The other letter was addressed to Mr. A. Harris, president of Harris Brothers, and was as follows:

"In the full page advertisement which you had published in the July 20th issue of the *Chicago Sunday Tribune*, the following statement was made in bold faced type:

"'On July 1st all manufacturers advanced their prices on heating material......'

"This statement was made in the section devoted to warm air furnaces, and naturally would be understood, by the average reader, to apply to this class of goods. Whereas, the fact is, that 27 of the largest manufacturers of warm air furnaces have written us that no advances have been made by them since last year, and that they know of no in-

stance where such an advance has been made since 1923.

"We note in your advertisement, which appeared in yesterday's issue of the *Chicago Tribune*, a slight change had been made in the above quotation, so that it now reads:

"'On July 1st leading manufacturers advanced their prices on heating material.....'

"This paragraph, however, appears under a sub-headline referring to warm air heating systems, and for that reason will also be considered, by the average reader, as applying to warm air furnaces, so that the slight change made in the wording really cannot be considered a vital one.

"In view of this fact, do you not think it fair that you should acknowledge that an error had been made by your advertising writer, and that the trade which you have injured by these misleading statements should have the assurance from you-through AMERICAN AR-TISAN-that your company will guard against similar occurrences of this nature; also that in some manner the public, which has been led to believe that retail furnace prices will be higher this fall, should be informed by you that your advertising writer had made a mistake.

"Your prompt attention and reply to this letter will be appreciated."

This letter evidently received reasonably prompt attention, for early on Wednesday morning, their "Director of Publicity" telephoned us and started to tell how earnestly they were trying to do business on a high-class scale and that they were now planning an advertisement for the August 9th issue of the Tribune. in which the reading matter would be arranged so that not even the most critical person would be able to find cause for complaint, also that the price statement would read in such a manner that it could not be misunderstood.

When we asked him why he had not done this when the matter was called to his attention the first time his reply was that "he did not think that anyone would check up on 'sixpoint' type matter," and that "really he did not think it was of much importance to the furnace installers, anyway—that we were making a mountain out of a mole hill."

He refused, however, to write a reply to our letter giving as his reason that "we would not publish it entirely as written," in spite of the fact that we assured him that he might write anything he liked and that we would publish it in its complete form, provided it contained an acknowledgement from him that he had misstated the actual facts in his advertisements.

The "Director of Publicity" for Harris Brothers, did keep his promise, however, and we are glad to show how well he did his work, for any furnace installer who cares to, can compete successfully with the concern who pays for the advertisements that we have been discussing.

Furnaces are not sold on a price basis, generally speaking—in the majority of cases they are sold on the basis of what they will do, the heat they will produce, the comfort they will create, the service they will render.

And the furnace installer who knows his business and has confidence in the furnace he sells will make a sale at a fair profit, in competition with the fellow who has nothing to talk about but price.

In the meantime-

Do not believe everything you read in mail order house or direct installer advertisements.

They are not to be relied on, as we have shown on numerous occasions.

And keep this issue of AMERICAN ARTISAN handy for reference in cases where prospective customers may bring up the matter of so-called lower prices quoted by concerns of that sort.

Domestic Appliance Company Becomes Selling Agency for Miles Automatic Furnace Fan.

The Domestic Appliance Company, distributors of various heating, freezing and cooking appliances, 6539 Euclid Avenue, Cleveland, Ohio, have taken over the sales and

distribution of the Miles automatic furnace fan.

This company has established a high reputation for efficiency—both in its sales department and in its installation of the various appliances which are handled by it, and the addition of the Miles automatic furnace fan to its line will no doubt prove a profitable venture for the company, for the fan manufacturer, for the furnace installers who decide to sell the fans and for the house owners who have them installed.

Mr. Janes, the president of the Domestic Appliance Company, stated recently to the representative of American Artisan that they had arranged for a very thorough campaign of coöperative selling, so that the furnace installer who is looking for something with which to make his installations more efficient at a low cost will find it easy to make profitable sales.

Full information as to prices and sales cooperation will be furnished to those who write to the Domestic Appliance Company, 6539 Euclid Avenue, Cleveland, Ohio.

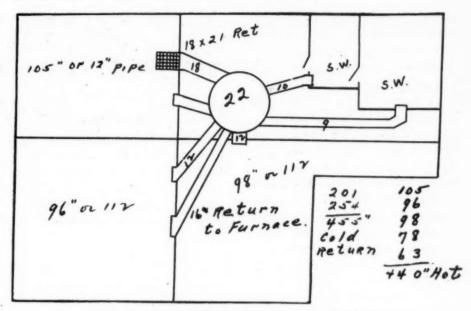
C. W. Davis of Whitewater, Wisconsin, Submits Solution to L. H. K.'s Problem.

Here is another solution to L. H. K.'s installation problem, of our July 19th issue, page 18. It comes from C. W. Davis of Whitewater, Wisconsin, who says:

To AMERICAN ARTISAN:

In reply to L. H. K.'s problem in the issue of July 19th, page 18, I would say that he was all wrong. His living and dining rooms have only 154 inches and it requires 201 inches, assuming that he has a 9-foot ceiling. His 9x11-foot bedroom has at least four feet too much pipe, while his cold air pipes are from extreme north and south walls. If he will shorten the cold air duct as shown on the sketch this will lessen the frictional resistance.

My experience has taught me to keep the warm and cold air ducts as close to the furnace as possible, and also to place the warm and cold air registers as close as possible. I



How C. W. Davis Would Solve L. H. K.'s Problem.

prefer the rotary to the rainbow system of heating.

Our friend only has 490 inches of warm air and 454 inches of cold air. My way of making an installation in rooms that are of doubtful measurement is to figure the wall and glass surface to get good results. Always connect the cold air ducts to a shoe in the furnace instead of using a pit.

C. W. DAVIS.

Whitewater, Wisconsin.

The Sharpest Knife Will Grow Dull After a While Unless a Whetstone Is Used Occasionally.

The sharpest knife, set off in a corner by itself, will rust and lose its edge. But if rubbed up against a whetstone occasionally it keeps its keenness for its whole lifetime.

Your mind is like the knife. It needs continual sharpening to keep its edge. Spontaneous combustion is a rare source of real ideas. Most worth-while things are sparks struck out by the contact of mind with mind.

Keep yourself in circulation. Jostle around in your community and shove your thoughts up against the thoughts of the people. What you know and what someone else knows will, every so often, prove to be flint and steel. From the contact will flash an idea that you can use.

Honest-to-gosh ideas, ones that

will work, are more valuable than diamonds, because scarcer. And in prospecting the minds of others for them you will incidentally acquire much information that will help you to keep abreast of your job. If you are a merchant or a salesman you can't know too much about what people are thinking and doing. No business man ever knew too much, if what he knew was facts.

The Telephone Salesman Will Sooner or Later Lose His Customers.

The salesman who telephones his customers for orders may be actuated by the very best of motives. He may wish to save the customer time and annoyance. From his employer's point of view he may wish to cover more territory. But this practice, growing greater and greater every day, eventually winds up with the customer giving his business to a house whose salesmen are not too busy to call on him,

Well Known Furnace Maker Places Security Oil Burner on the Market.

The Security Stove and Manufacturing Company, Kansas City, Missouri, which has been making stoves and furnaces for thirty years and has as its secretary-treasurer a man by the name of L. W. Millis.

whose instructive discussions on warm air heating problems have been published at frequent intervals during the past years.

Recently this company has placed an oil burner on the market, which is especially suited for warm air furnaces and which they state is noiseless, although power driven and in other ways is preferable to others because of being free from smoke or odor and not liable to form carbon.

In addition, the Security oil burner can be sold at a moderate price and still yield a good profit to the installer.

Full information will be sent to any installer who writes to Security Stove and Manufacuring Company, 17th and Oakland Avenue, Kansas City, Missouri.

Another Fine Example of Service Rendered by Furnace Manufacturer.

The Rudy Furnace Company has a novel exhibit available for Rudy dealers as shown in the illustration herewith. It is a miniature land-scape, with an old Dutch windmill that rotates in the foreground and a placid lake on which a solitary fisherman seated beside his jug of "bait," gets a bite from time to time. In the background there is a miniature truck hauling a Rudy furnace and in the distant hills is a road sign giving the dealer's name. The "Old Mill Pond" exhibit is very popular

and never fails to draw a big crowd. It occupies a frontage of about ten feet and is some six feet deep. The painted background scene is about five feet high.

Publicity Bureau Wants Short Articles on Furnace Heating.

The Publicity Bureau of the National Warm Air Heating and Ventilating Association has sent us the following appeal:

WILL YOU HELP US?

We need your help in the way of articles of from 100 to 500 words, upon which to base the copy which will be sent out by the Publicity Bureau.

Write us anything regarding Warm Air Heating, and we will be able to spread your ideas, where they will do the greatest good for the industry and educate the public.

You do not have to write a long article; short items are wanted especially.

Send in at once anything you think should have wider publicity.

PUBLICITY BUREAU, National Warm Air Heating and Ventilating Association, 52 West Gay Street, Columbus, Ohio.

EDITOR'S NOTE: The Publicity Bureau is working for the installer as well as for the manufacturer, and the installer owes it to himself to help in the great work which has been undertaken by the National Warm Air Heating and Ventilating Association.

So send in your story. Make it short and to the point.

The members of the Publicity Bureau are: E. F. Glore, Abram Cox Stove Company, Philadelphia; Chairman George Harms, F. Meyer & Brother Company, Peoria, Illinois; G. L. Bridge, Bridge & Beach Manufacturing Company, St. Louis; R. C. Walker, Meyer Furnace Company, Peoria, and Walter Will, Sill Stove Works, Rochester, New York.

New Discount and Price List of Front Rank Furnace Pipe and Fittings Is Issued.

Effective as of August 1, 1924, discount Sheet No. 40 has been issued by the Langerberg Manufacturing Company, covering front, single and double pipe and fittings for warm air furnaces, as shown in their Catalog No. 2.

A price list of round pipe and fittings and 26 and 24 gauge galvanized and black iron elbows, as well as square galvanized iron pipe and elbows accompanies the discount sheet.

Initiative Is One of Chief Stones in Building a Success.

It is one of the blessings of our business that it is comparatively free. There is ample room for the play of initiative. If a man has a new idea, there is nothing to prevent him from putting it to the test of practice. If it works out, he has his reward. If it proves faulty, he loses his money, his efforts and his dream. It is from such experiments that progress results. If your neighbor prefers to spend his money, at the rate of a cent or two per dozen premium on eggs, as advertising, why is that not just as good business as to put it into any other form of advertising?



The Old Mill Pond. Window Display Designed by Rudy Furnace Company for Its Customers.

We may help you-ask us.

Ornamental Dormer Window Cornice Patterns Require Little Complicated Treatment.

Lookouts Are Made of Wood and Are Anchored in the Brick Wall While Building Is Under Erection.

Written Especially for American Artisan by O. W. Kothe, Principal, St. Louis Technical Institute, St. Louis, Missouri.

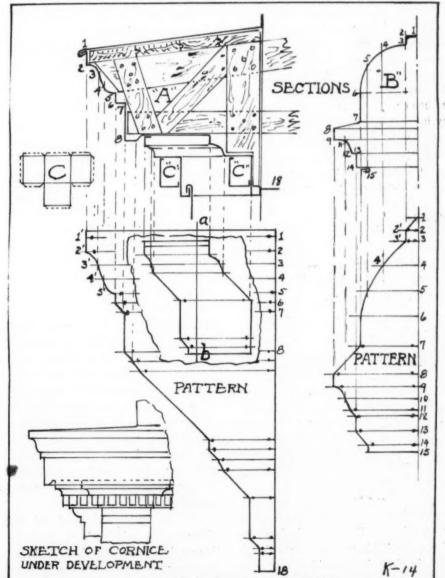
IN LAYING out more cornice patterns for the ornamental dormer window, which appeared sometime ago, we find most of the work of a simple nature, requiring little complicated treatment. Take the cornice shown in the lower sketch. as well as in the elevation of our section "A," it is held in place by wooden frames called look-outs. These are anchored in the brick wall while the building is under erection. Sometimes they are made of angle iron, so as to make the entire job fireproof. But wood is used more often because it makes assembling easier and quicker. Then, too, it is seldom that a fire starts because of the wood in the cornice, and if the building does become damaged by fire, the chances are that the soldering of the cornice will also melt off and thus require removing in order to repair properly.

But to lay off the square mitres the idea is that by the projection of lines and the width of the girth, 45degree angles are developed. Thus, by dividing all curved lines in the detail in equal spaces and numbering each point and bend-then with dividers pick each point in numerical order and set it on a straight line as 1-18 on the lower section, and from each of these points bring over horizontal lines, then by dropping lines from each point in section, we cross those in stretchout of similar number. This is shown in points 1'-2'-3', etc. Now, each of these points will be intersections when formed up on a 45-degree angle and, therefore, makes a 90-degree mitre, for example, the planceer or points 10-11 in this pattern, shows the line on a 45-degree angle as well as others. If this idea is well looked into and studied out the workmen will have no difficulty in understanding the reasons why dropping lines in the

fashion we show, will produce a square mitre.

The same holds true in developing the crown or the dome "B," where all curved lines are divided in equal spaces and each point is numbered as from 1 to 15. Then each point is taken separately and transferred on the girth line 1-15, after which stretchout lines are drawn and then from each point in section "B" we drop lines to intersect those in stretchout of similar number. This

gives points 2'-3'-4', etc., and allows for sketching in the mitre lines. In setting off the modillion under cornice "A" we pick the girth and set it off as a-b, which, in this case, is placed inside of the main pattern of the cornice because of lack of space. Observe the front of modillion forms a square mitre, while the back forms a butt mitre, although the details are the same, only at the bottom a little change is made. The front pattern can be



Pattern Showing Cornice Under Development.

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used for marking out the pattern for front of modillion, while the pattern for the side can be used for both sides. This is all there is to it and after they are formed, they are soldered together. The dentils "C" are laid out similar as the pattern C shows.

In making modillions and dentils there is really more work of a practical nature than to the drafting end of it, and because of this, there are so many workmen feel they can get by just doing the mechanical duties and making a simple pattern or so with that nothing else is needed. The fact is, nothing else is needed if a person doesn't want it, but if a person aspires to higher things in life, greater comfort and more satisfaction, a greater recognition of personal services—then a person cannot very well get along without knowing his trade in a comprehensive manner. Some men can leave a splendid impression at the very start and a person thinks they will turn out to be valuable assets to the shop; but pretty soon a person cannot help but believe they have everything they have got at the very start, and after that they become more and more helpless the longer they work. Such deficient qualities are only the result of being satisfied in getting by and not in getting more out of it by putting more into your profession.

W. G. Schrack Is a Firm Believer in the Blotter Method of Advertising.

W. G. Schrack, 118 North Fourth Street, Camden, New Jersey, believes in the blotter method of advertising. In sending out these lit-



— just had a customer's roof to blow up; costing considerable to repair.

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W. G. SCHRACK 118 H. 4th St. Cambr Could have been avoided, if they had it looked after.

tle blotters, shown in the illustration, to a selected clientele he believes he is accomplishing something which is a physical impossibility for any salesman to do. In the case of the salesman, he calls and spends at most twenty minutes or half hour and leaves. His card is placed in your pocket or "on file."

With the blotter this does not hap-

pen. The blotter is a sort of privileged character in this respect. It has a constant interview with its man because it is sent through the mail to the "boss'" desk.

Frank Cushman Discusses Apprenticeship and National Vocational Education Work.

Urges Intelligent Cooperation Between Employers and Employees That Competent Workers May Be Supplied in Future.

A T THE recent national sheet metal convention in Washington, D. C., Frank Cushman, chief of the Industrial Education Service of the Federal Board for Vocational Education, delivered a very instructive address on "Apprenticeship and the Public Program of Vocational Education," from which the following is quoted:

Excerpts from Mr. Cushman's Address.

Fifty years ago it was fashionable for all boys to learn a trade, but for the past twenty-five or thirty years we have been passing through a cycle which has been characterized by an absence of interest on the part of most American boys in any of the skilled trades. Throughout this period there has been a certain amount of interest in apprenticeship but the activities have been confined largely to the machine trades rather than to the building trades. For example, most of the railroads of the country have had in operation systems of apprenticeship for railroad shop men. Also a few of the larger machine tool industries have consistently maintained apprenticeship training. For the most part. however, we have depended upon European countries to train our skilled workmen, and apprenticeship in the old sense has generally been considered a thing of the past. This decrease of interest in apprenticeship occurred concurrently with a tremendous increase in high school attendance.

The result of the work of the Douglas Commission in the State of Massachusetts in 1906 indicated that an emergency was developing with regard to apprenticeship and other

phases of trade and industrial education. At the same time that the Douglas Commission was investigating the need and formulating recommendations for the State of Massachusetts the National Society for the Promotion of Industrial Education was organized to arouse interest throughout the country in support of an adequate system of trade and industrial education. This society was composed of manufacturers, organized labor, employers of skilled labor, and progressive educators. The organization of President Wilson's Commission on Vocational Education was to a considerable extent due to the activities of this society.

Congress Passes Vocational Education Act.

In 1914 the Commission made a report which was the basis for the National Vocational Education Act which was passed by Congress and signed by the President on February 23, 1917. The purpose of this brief historical sketch is to draw attention to the fact that the recognition of the need for vocational education in this country is not a development of the past year or two.

Notwithstanding the fact that vocational education under public supervision has been growing by leaps and bounds for the past seven years, hardly a week passes that we do not come in contact with persons who have never heard that there is any such organization as the Federal Board for Vocational Education at work on the problems of apprenticeship and all phases of trade and industrial education. This situation may be due to the fact that vocational education has not been well ad-

vertised. Granting that this may be true, the only explanation I have to make is that the Federal Government, through the Federal Board for Vocational Education, and the states, through the State Boards for Vocational Education, working on a co-operative basis, have been so busy trying to do the job that was outlined for them in Federal and State legislation they have not felt the necessity for an advertising campaign. The procedure has been consistently followed of letting the results speak for themselves, upon the assumption that sound developments in vocational training must inevitably receive recognition. Furthermore, I am sure there has been a feeling on the part of the great majority of the men at work on this problem that there was no formula or series of formulas which could be worked out for the purpose of solving all problems of trade and industrial training. And we have never assumed the risk of discrediting vocational education by making extravagant claims or promises to accomplish the impossible.

Enrollment Grows Fast.

During the first year of the operation of the National Vocational Education Act all of the 48 States had accepted its provisions and entered into co-operative relationships with the Federal Board. During this first year 164,000 persons were enrolled in schools and classes which measured up to the minimum standards specified in the Federal Act. In June, 1923, this enrollment had increased to 537,000, and of this total number 326,000 were enrolled in schools and classes designated as trade or industrial.

In view of the present developments in vocational education it is interesting to go back to the 1914 report of the President's commission and read the arguments therein set forth in support of a national program of vocational education. Some of the needs which were discussed in this report are as follows:

- To conserve and develop our natural resources.
- 2. To prevent waste of human labor.

- 3. To provide a supplement to apprenticeship.
- 4. To increase wage earning power.
- 5. To meet the increasing demand for trained workmen.
- 6. To offset the increased cost of living.
- 7. Vocational education is a wise business investment.
- 8. Our national prosperity is at stake.

In addition to the preceding economic reasons why it was imperative to develop a better system of vocational education in this country, the following points were discussed for the purpose of bringing out the social and educational needs for vocational training:

- 1. To democratize the education of the country.
- 2. To exert a much needed influence on the aims and methods in general education.
- To stabilize employment conditions and reduce social and industrial unrest.
- 4. To make possible higher standards of living on the part of workers

Need for Skilled Workmen Great.

The arguments advanced to indicate the need for vocational education in 1914 are just as true today as they were ten years ago. In fact in many cases the arguments apply with greater force today than they did in 1914 because of the changed economic situation, the greatly increased cost of living, and the scarcity of skilled workers due to the world war and recent restrictions upon immigration. The latter has practically eliminated the possibility of securing skilled workmen from Europe.

The present revival of interest in apprenticeship for the skilled trades is nation wide. The interest of employer organizations, labor organizations, and public school authorities is widespread. Definite progress in the training of apprentices under well directed plans is being made in New York, Boston, Philadelphia, Cleveland, Detroit, Chicago, Milwaukee, Seattle, Portland, Los Angeles, and many other cities. The organization

and work of the American Construction Council may be mentioned as further evidence of the nation-wide interest in apprenticeship in the building trades.

This paper would have little value if it failed to point out some of the essential points which characterize practically every successful development in apprentice education for the building trades throughout the United States. In line with its responsibilities for promoting vocational education, representatives of the Federal Board have within the past year conducted conferences in various sections of the country for the purpose of assisting local communities in making plans which would have at least a chance to succeed because of the fact that they were fundamentally sound.

Main Factors in Success.

The following points have been agreed to in practically all cases where representative employers, labor leaders, and school people have been brought together for a discussion of this problem:

1. Any successful plan for apprentice training should be based upon the co-operative effort of employers, organized labor, and the public schools. Where such cooperation has not been secured the attempts to set up an effective system of apprenticeship have been largely failures. Where a group of employers decide to have their own school without regard to the interests of labor, or at least without consulting labor and attempting to secure its co-operation, trouble usually results. Where labor organizations attempt to set up a program of training for apprentices without the co-operation either of employers or of the public schools results are not what they could be with such cooperation. Furthermore, there is no reason why a labor organization should pay the cost of training apprentices inasmuch as vocational efficiency is profitable not only to the man himself but to his employer and also to the community in which he As a rule, where public schools offer training without securing the interest and support of both

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employers and labor the program is not considered seriously. Too often trade instruction in the public schools has been unjustly condemned and discounted both by employers and employes because of the fact that school officials were attempting to deal with the problem without first having secured the support of the parties whose interests were most affected by the work.

A successful apprenticeship program, therefore, must be the cooperative effort of employes, labor, and the public schools. While these three groups are perhaps the most important factor, there are other interests in every city which are usually ready and willing to cooperate in advancing a program of apprenticeship for the building trades. In many places architects have been the leaders; in others, manufacturers and dealers in building materials and supplies, engineers, real estate men, and bankers have actively supported the movement.

How to Attract More Apprentices.

2. Next to the need for securing the cooperation of the parties whose interests are affected by vocational efficiency in the building trades, the most important consideration is to make apprenticeship more attractive to boys through proper incentives. Much has been said recently about the breakdown of apprenticeship, the disappearing apprentice, and the need for doing something to direct boys away from white collar jobs. The trouble is not entirely with the boys. It is useless to blame the American boy for not becoming interested in learning a skilled trade. The skilled trades have not been made sufficiently attractive to him. Too few reasons could be advanced as to why an intelligent American boy should want to become an apprentice. The boys are all right and have just as much common sense as boys of past generations have had. All that is needed to secure an actual revival of interest in apprenticeship in the skilled trades is to make apprenticeship so attractive that it will compete with other lines of opportunities and other lines of employment. Where proper incentives have been supplied—such as, a guarantee of opportunity to acquire a mastery of the trade, assurance of continuous employment during apprenticeship, and provision for acquiring manipulative skill in the trade and for learning what may be called the technical side of the trade through instruction supplementary to that received on the job—there has been no difficulty in securing apprentices.

Not Always Matter of Wages.

Some of these incentives are quite as potent in securing and maintain-

"I know of no better way to raise the standard of the sheet metal industry than by giving our apprentices and journeymen a thorough training as real artisans in addition to an education that will equip them to meet the problems of every day life in an independent way.

"Educate the sheet metal worker on business methods and you will elevate the industry.

"There is no true independence where there is a lack of training."

ing the interest of a boy in becoming a skilled worker as the wages paid. High wages will not get and hold the right type of employe if the wage is the only incentive provided. Where apprenticeship is promoted on the basis that the apprentice will secure a real opportunity to become a master of his chosen craft, not only from the practical but also from the technical side, there is no shortage of boys who will become interested in the proposition. Such a complete training calls for both practical experience on the job and instruction in related subjects in a classroom, either through evening or part-time schools.

Another point, boys who may be interested in becoming apprentices in the building trades are not ordinarily found in high schools. Many attempts to set up systems of apprenticeship have failed because of

the unwarranted assumption that all of the boys who might wish to become apprentices were already in high schools, and consequently the problem would be to interest some of these boys in a program of apprentice training. In most cities not more than 20 to 30 per cent of the boys who finish the elementary school enter high school, and of those who enter, as a rule, only a relatively small percentage graduate. For the most part, therefore, it is useless to look for apprentices either among the small group who graduate from high school or among those who are expecting to finish their high school course. In this connection it is well to remember that dropping out of high school is not in itself an indication of inferior mentality.

Organization Interest.

The most encouraging thing about the present situation is the interest that national and local organizations are taking in apprenticeship. Apprenticeship is proably being conducted at this time in a more intelligent way than it has ever been conducted in the history of industry. While the present crisis was to a certain extent anticipated it is only within the last year or two that organizations of employers have become keenly interested in the problem. Organized labor, it should be pointed out, has always stood for thorough and adequate training of apprentices in all of the organized trades. Craft pride has been responsible in part for this. Real labor leaders have always been supporters of vocational education under public control for the purpose of keeping up desirable standards of workmanship in the various crafts as well as for promoting the training of apprentices.

Each of the forty-eight states now has an organization which is ready to cooperate and to assist in every way in the promotion of better apprenticeship training. Funds are available for the purpose of defraying the expenses of such training. It was long ago recognized that the interest of the public in vocational efficiency justified the utilization of

public funds for vocational education. The Federal Government is doing its share in the promotion of this work, and it is also true that every one of the forty-eight states is doing or is prepared to do its share.

The one thing needed at this time to put in operation an adequate program of apprentice training in all of the building trades is cooperation. While much can be done from a national standpoint, the problem is in many respects strictly a local one that must be worked out in each city according to the particular conditions there prevailing. Enough information as to what needs to be done is available to enable any city to set up and operate an effective program, and any city that does not have within the next twelve months a real program of apprenticeship in the building trades will have to take the blame upon itself. If the program fails it will be due more to a lack of cooperation on the part of contractors, labor, and the public schools than to any other factor.

Wisconsin Sheet Metal Men Will Hold Their Annual Picnic Thursday, August 21st.

No further explanation is necessary with this letter from Secretary Kelm, except possibly that a cordial invitation is extended to every sheet metal contractor in Wisconsin to attend and partake of the many good things for which this Milwaukee bunch of good fellows have become famous:

To All Sheet Metal Contractors in Wisconsin:

Hark! Ye men of steel.

On the night of August 20th take a spade and go out back of your garage and dig a hole in the ground, and into it one by one drop all your cares and troubles and cover it up again and go to bed. The next morning when you get up, get ready for one of the best times you have ever had, for the Wisconsin Association of Sheet Metal Contractors invite you to their stag picnic for men only on Thursday, August 21,

1924, at 10 a. m., Knepel's Grove, Mequon, Wisconsin, 14 miles north from the heart of Milwaukee on Highway 57, called the Green Bay Road.

If you come by rail take a Milwaukee Northern interurban car and get off at Mequon station if the car is marked "local," and at Thiensville station if it is marked "limited." These two stations are within easy walking distance of the picnic grounds.

Dinner will be served at 12 o'clock noon and everything will be free, so don't say you can't come for this is going to be the biggest blowout we have ever had and one that you will never forget; so just jump into your gas wagon and join the livest bunch of sheet metal artists under the sun. Rain or shine. We want you to come and join us and we will show you the finest time you have had since the day you shot your first firecracker.

We will be looking for you so please sign and return the enclosed post card (at once without fail) so that we will know how many plates to prepare.

Yours for a good old time,

R. E. KELM.

MR. A. G. PEDERSEN, Editor.

American Artisan and Hardware Record:

Your editorial entitled, "Pittsburgh Plus Ruling Is Not Likely to Affect Price of Steel Very Much," appearing in the August 2nd issue of American Artisan and Hardware Record, is worthy of a second reading by all those interested in this subject. The law of supply and demand always has, and always will, govern the price of steel, and the whole case has been "much ado about nothing."

I congratulate you upon this common sense article, so much needed at this time.

Yours very truly, GEORGE H. CHARLS,

Vice President and General Manager, United Alloy Steel Corporation.

Indiana Sheet Metal Men Will Meet in 1925 Convention at Lafayette.

Secretary Leslie W. Beach, of the Indiana Sheet Metal Contractors' Association, notifies us that at the meeting of the Directors, held during the outing at Paul Jordan's country home on August 2nd, it was decided to hold the 1925 convention in Lafayette, Indiana.

Notes and Oueries

Bean Testing Scales.

From J. Wallington, Saranac, Michigan. Kindly advise me who manufactures bean testing scales.

Ans.—Henry Troemner Company, 911 Arch Street, Philadelphia, Pennsylvania; Fairbanks Morse and Company, 900 South Wabash Avenue, Chicago, Illinois; A. Daigger and Company, 54 West Kinzie, Chicago, Illinois.

Horse Head Zinc.

From H. M. Joda, 1637 South State Street, Chicago, Illinois.

Where can I get Horse Head

Ans.—Mineral Point Zinc Company, 140 South Dearborn Street, Chicago, Illinois.

Repair Parts for Robinson Crescent Furnace.

From Madison Gilt Edge Company, 107 North Fairchild Street, Madison, Wisconsin.

Where can we secure repair parts for the Robinson Crescent No. 24 furnace?

Ans.—Northwestern Stove Repair Company, 654 West Roosevelt Road, Chicago, Illinois.

Grates for Jahant Furnace.

From John F. Cartwright, 224 Main Street, Bowling Green, Kentucky.

Who can furnish grates for No. 4 Jahant hot blast furnace?

Ans.—Northwestern Stove Repair Company, 654 West Roosevelt Road, Chicago, Illinois.

Furnace Grates.

From George Weaver, R. F. D. No. 35, Hubbard Road, Youngstown, Ohio. Where can I get furnace grates of all makes?

Ans.—Northwestern Stove Repair Company, 662 West Roosevelt Road, Chicago, Illinois.

Wild Duck Season Window Display Creates Big Demand for Shootin' Irons.

Reeds and Slough Combine to Make Excellent Setting for Duck Hunting Goods Display.

HAVE you ever packed a camping outfit and a gun into the back of a Dodge coupe and rambled off to some lonely lake? If you have, you can well appreciate the thrill the young man shown in the accompanying illustration is experiencing. He apparently has removed himself from all signs of civilization and is pursuing his favorite pleasure.

Looks are often deceiving, how-

These windows are not difficult to make and they are highly recommended for use by the hardware man who wishes to effect a rapid turnover in guns and other fall sporting goods.

Little or no reference is made to the actual necessaries for a trip such as the one depicted suggests, but the display puts over the idea in good shape. Those which the window interests will be brought in

Have You Gone After Camping Trade?

There are few camping parties which do not discover, after a few days in the open, that they have forgotten some important item in their equipment. There are few which do not discover additional wants as the season progresses. The nearest hardware dealer, even if he is 20 or 30 miles distant, can pick up this



Attractive Fall Duck Hunting and Sporting Goods Window Display Which Puts the Idea Across in Fine Shape and Produces Rapid Stock Turnover.

ever, and they really are in this case. The scene is a window display in the heart of a metropolis designed to arouse the duck hunting longing in the breasts of sportsmen.

The young man is a dummy, of course, and the ducks are decoys suspended from the ceiling by means of very fine white threads. The slough is painted on a canvas, but the reeds in the foreground have been gathered and placed in the position in which they appear.

soon enough for their outfits, in whole or in part.

It is suggested that complete information be acquired with regard to the surrounding lakes and duck hunting laws, so that your store will be known as the headquarters for reliable information on such matters.

Now let's have a secret society solemnly pledging its members to mind their own business.

business—that is, if he has means of communicating. In many instances it is merely a matter of answering a long distance telephone call and loading goods on a trolley car. Or the hardware dealer who has a motor car at hand can take an hour's run to the cottages one or two evenings a week and, by mixing with the people there and making known his business, can often pick up a lot of orders to be delivered on the next trip out. Often it is a good stunt to

take along a few lanterns, hatchets, flashlights and similar convenient articles for which, in any string of summer cottages, there is sure to be some demand.

The business requires some extra effort and a little special study, but it is well worth catering to.

Psychological Placing of Milady's Face Powder Creates Fifty Dollar Sale for This Merchant.

Lady Customer Compliments Store Salesman on Store's Excellent Rest Room Facilities After Making Purchase.

SMALL conveniences in the store are productive of good will and business in volume far in excess of their cost of installation and maintenance.

It is almost common knowledge among progressive retail merchants that the installation of convenient ladies' rest rooms, telephone booths and comfortable seats is an innovation in retail merchandising of primary magnitude. The psychology of this method of increasing sales is indeed simple.

The woman to whom it becomes known that the store maintains a special comfort station for her convenience while in the shopping district is naturally going to be more friendly and partial to that store than she is to the others who have not provided for her comfort in this way.

The women are the natural shoppers of the nation. Ninety-five per cent of the househould buying in every family is done directly by or under the direction of the woman of the house.

Therefore, if attracted to the store for one purpose, the other can be brought to milady's attention in such a way as to create sales.

It is hard for us to believe that an item so small as enough powder to take the shine from milady's face would create a \$50 sale not only once, but many times. Yet it is a fact and one very simply worked out.

The merchant of a hardware store decided to install a comfort station for the convenience of woman shoppers visiting the downtown district each day. It so happened, however, that other stores had like provisions and he realized that it was up to him

to be unique with his. He reasoned that a lavish expenditure of money on such an adventure would not effect his purpose. The train of thought which ran through his mind finally brought him to ask himself the question: "What would be the most natural and pressing need of a woman in the shopping district only for a few hours?" Obviously just enough

THERE IS JUST ONE CAN HERE is just one condisecure employment and a living, nourishing, profitable wage, for whatever they contribute to the enterprise, be it labor or capital, and that condition is that some one make a profit by it. That is the sound basis for the distribution of wealth and the only one. It cannot be done by law, it cannot be done by public ownership, it cannot be done by socialism. When you deny the right to a profit you deny the right of a reward to thrift and industry.

CALVIN COOLIDGE

powder of a good quality to take the shine from her nose. This amount of powder would cost him practically nothing and still it would influence many women to drop into the store during the day even when they had not thought of any purchase they wanted to make there.

After creating a necessity for milady to enter the store where she had no original intention of going, our merchant decided the next step would be to arrange the goods on show cases in such a way as to attract her attention to them. They sold themselves after that.

One woman went so far as to ad-

mit openly to the salesman, after making a \$50 purchase in a department of the store, that she had had no thought of entering any particular store until she was reminded—by intuition we are expected to suppose—that her nose was shiny, but to her chagrin she had neglected to bring her paraphernalia for remedying that difficulty. This made her remember the excellent facilities the store mentioned had provided for such emergencies and consequently she soon found herself within the store's confines.

The sales psychology of the rest room and comfort station in the store is an established fact worked out on thoroughly scientific principles. It works. Try it out yourself.

Watch Your Credit Accounts and Study Methods of Other Successful Merchants.

W. T. Stillman, Oshkosh, Wisconsin, in a talk on credit, said, that it is a much abused word. "Credit is the backbone of business," he declared, "and I would like to suggest that the giving out of confidential statements yearly or monthly to your banker is a good policy. It's as much of a mistake to have too much money out as too little. All credits should be carefully watched.

"A merchant is rendering service," Mr. Stillman said, "when he carries an account thirty days and he should let that be known. Don't allow a customer to buy more than he can pay for reasonably and you will reduce some of your troubles. Study the methods of merchants in other lines and you will find many ideas you can apply to your own business."

Public Must Be Told About Retailers' Problems.

T. N. Witten, Trenton, Missouri, in discussing the public and distribution, during the recent convention of the National Retail Hardware Association, said that the public must be given a better understanding of distribution and the value of

retailers' service and that retailers must be educated to a better understanding of their obligations to the public.

The popular misconception or absence of any conception of the service, complexities and compensation of retailing, he said, are the common causes of misunderstanding.

Mr. Witten said that the good merchant takes his weaker brother by the hand and helps him so that they both together may work together to build a better and a more prosperous community. He advised the retailers not to keep their noses too close to the grindstone, but to get out and get in contact with people they should know in their communities. This is a day for education, he said, and the purpose of life is not just to make money but to be

Secretary J. B. Carson Announces Dates for Conventions of Ohio and West Va. Hardware Associations.

Dates for the 1925 conventions and exhibitions of the Ohio and West Virginia Hardware Associations have been set and are as follows:

Ohio-February 10 to 13, 1925, in Columbus.

West Virginia—January 20 to 23, 1925, in Clarksburg.

James B. Carson, 1001 Schwind Building, Dayton, Ohio, is secretary of both associations.

Simplification in Builders' Hardware Will Represent 26 per Cent of 7,000 Items.

Steps which will affect the building construction industry of the entire country were taken recently when manufacturers, distributors and representatives of consumers of builders' hardware, meeting under the auspices of the division of simplified practice in the Department of Commerce, went on record in favor of wholesale reductions in the numbers of sizes, models and finishes of locks and lock trim, butts and hinges and shelf and miscellaneous builders' hardware.

The reductions as adopted represent 26 per cent of the 7,000 items manufactured by the leading makers of builders' hardware.

Coming Conventions

Wisconsin Sheet Metal Contractors' Association Outing, Milwaukee, August 21, 1924. Paul L. Biersach, 661 Hubbard Street, or R. E. Kelm, 367 Third Street,

National Hardware Association Convention, Atlantic City, New Jersey, October 13, 14, 15, 16, 17, 1924. Hotel Headquarters, Marlborough-Blenhein. T. J. Fernley, Secretary-Treasurer, 505 Arch Fernley, Secretary-Street, Philadelphia.

American Hardware Manufacturers Association Convention, Atlantic City, New Jersey, October 14, 15, 16, 17, 1924. Hotel Headquarters, Marlborough-Blenheim. F. D. Mitchell, Secretary-Treasurer, 1819 Broadway, New York City.

Mid-Year Meeting of the National Warm Air Heating and Ventilating Association and Dedication of the Warm Air Heating Research Residence, Ur-bana, Illinois, December 2, 1924. Allen W. Williams, Secretary, Columbus, Ohio.

Kentucky Hardware and Implement Association Convention, Jefferson County Armory, Louisville, week of January 18, 1925. J. M. Stone, Secretary-Treas-urer, 200 Republic Building, Louisville.

Western Retail Implement and Hardware Association Convention, Kansas City, Missouri, January 13, 14, 15, 1925. H. J. Hodge, Secretary, Abilene, Kansas.

Texas Hardware and Implement Association Convention, Dallas, Texas, January 20, 21, 22, 1925. Dan Scoates, Sec-

retary-Treasurer, College Station.
West Virginia Hardware Association,
Convention and Exhibition, Clarksburg,
January 20 to 23, 1925. James B. Carson, Secretary, 1001 Schwind Building, Dayton, Ohio.

Indiana Sheet Metal Contractors' Association, Convention, Lafayette, February (dates not decided). Leslie Beach, 1136 Main Street, Richmond. Leslie

Oklahoma Hardware and Implement Association Convention, Masonic Tem-

Association Convention, Masonic Temple, Oklahoma City, February 3, 4, 5, 1925. Charles L. Unger, Secretary-Treasurer, Oklahoma City.

Nebraska Retail Hardware Association Convention and Exhibition, Omaha, February 3, 4, 5, 6, 1925. Convention headquarters, Rome Hotel. Exhibition, City Auditorium, George H. Dietz, See City Auditorium. George H. Dietz, Secretary, 414-419 Little Building, Lincoln. Wisconsin Retail Hardware Associa-

visconsin Retail Hardware Associa-tion Convention and Exhibition, Audi-torium, Milwaukee, February 4, 5, 6, 1925. P. J. Jacobs, Secretary-Treasurer, Stevens Point. Ohio Hardware Association, Conven-

tion and Exhibition, Columbus, February 10 to 13, 1925. James B. Carson, Secretary, 1001 Schwind Building, Dayton, Ohio.

New York State Retail Hardware Association Convention and Exposition, Buffalo, February 10, 11, 12, 13, 1925. Headquarters, Hotel Statler. Exposition at the Broadway Auditorium. John B. Foley, Secretary, City Bank Building, Syracuse.

North Dakota Retail Hardware Association Convention (place not yet selected), February 11, 12, 13, 1925. C. N. Barnes, Secretary, Grand Forks.

Montana Implement and Hardware Association Convention, Helena, February 13, 14, 1925. A. C. Talmage, Secretary-Treasurer, Bozeman.

Pennsylvania and Atlantic Seaboard Hardware Association Convention and Exhibition, February 16 to 20, 1925, at Philadelphia Commercial Museum. Philadelphia Commercial Museum. Sharon E. Jones, Secretary, 604 Wesley Building, Philadelphia.

Minnesota Retail Hardware Associa-Minnesota Retail Hardware Associa-tion Convention, St. Paul Auditorium, St. Paul, February 17, 18, 19, 20, 1925. C. H. Casey, Secretary, Nicollet Avenue and Twenty-fourth Street, Minneapolis.

New England Hardware Dealers' Association Convention and Exhibition, Mechanics' Building, Boston, Massachusetts, February 23, 24, 25, 1925. George A. Fiel, Secretary, 10 High Street, Boston.

Michigan Retail Hardware Association Convention, Grand Rapids, February 24, 25, 26, 27, 1925. Hotel headquarters, Hotel Pantlind. A. J. Scott, Secretary, Marine City.
Southeastern Retail Hardware Asso-

Southeastern Retail Hardware Association Convention and Exhibition, Birmingham, Alabama, May, 1925. Walter Harlan, Secretary-Treasurer, 701 Grand Theater Building, Atlanta, Georgia. Arkansas Retail Hardware Association Convention, Little Rock, May, 1925. L. P. Biggs, Secretary, 815-816 Southern Trust Building, Little Rock. National Retail Hardware Association, Philadelphia, June, 1925. H. P. Sheets.

Philadelphia, June, 1925. H. P. Sheets, Secretary, Indianapolis.

Retail Hardware Doings

Arizona.

W. W. Hollomon and son, Jack, who arrived in Safford recently from Tula-New Mexico, have taken over the hardware and furniture business of the Gila Valley Furniture and Hardware Store, formerly owned by M. E. O'Bryan. Minnesota.

Merrill Feigal and Jack Stucky have purchased the stock and good will of the Noser Hardware Store, Pine Island.

Missouri. J. F. Patterson has traded two of his Corydon residence properties for stock of hardware at Ridgeway, and has gone there to take charge of the business.

Miles Hutchinson sold his stock of hardware and groceries recently to G. Wickam of Rich Hill. Mr. Wickam took charge of the business at once, occupying the Jesse Webb property on Yeates Street.

Oklahoma.

Announcement was made that LeRoy Brown has been included as junior partner in the Newton-Campbell Hardware Company, Rumright, which hereafter will bear the name Newton-Campbell-Brown Company.

Texas.

Announcement was made of the pur-chase of the local Borderland Hardware Company, Harlingen, by the owners of the Farmers' Hardware Company, which has been in business at San Benito for the last two and a half years. cern will be known as the Farmers' Hardware Company of Harlingen.

Springfield, Ohio, Stove Merchant Recognizes Value of Reputation He Has Established.

Charles F. Hauck Talks Service and Quality in All His Advertisements.

Some weeks ago we published an article reviewing the store paper published by Charles F. Hauck & Company, the stove and hardware firm in Springfield, Ohio, and here are some more clippings from a more recent issue of that same newsy and profit producing paper.

We had a fine visit with Mr. Charles F. Hauck during the recent

in connection with his stove and hardware business, or maybe it is the other way. At any rate, he manages to make money out of the combination in a city as large as Springfield, and sometimes we wonder why more hardwaremen in the so-called metropolitan cities do not operate sheet metal shops. There is certainly money in it.

Ask Fred Ruhling in Chicago, if you want another example.

Well—anyway—Mr. Hauck went on to tell that he started his mailing list from his account book, but so many people asked him to put their names on his list that now it is fully twice as large as it was when he began to sent out his store paper.

And it is no wonder, for this store paper is really worth while—both from the standpoint of the straight reading matter and because of the interesting manner in which the advertisements are prepared.

And that oil stove ad—tells how much oil it takes to operate the stove; tells how close the flame gets to the cooking surface; tells how little money one has to pay.

Then there is a small ad (not shown) of the phone, and the real service that the firm renders. But this, of course, can only be said and sounds right when it is a firm like Charles T. Hauck & Company that says it.

And the story about "My Ma, She Takes No Tips."

That certainly is a humdinger. The "odd price" fellow surely gets the hooks thrown into him by "Sonny" in that story.

Incidentally, Mr. Hauek tells us that even though the store paper costs more money than he has ever spent in proportion to his business, it brings in enough extra direct sales to make it a paying proposi-

And that is the main point, for no matter how clever an advertising stunt may be, unless it pays out in returns that you can count in your

My Ma She Takes No Tips

My Pa looking at the paper, says to my Ma, what a feller he knows told him he gave his wife a good tip 'bout how some stores lop off a few cents on the price like 97 cents 'stead of a Dollar and if you know which you're buying it runs up to quite a bit of Saving. And my Ma she just laffs and says that feller ought to run a house a while and see how smart he isn't. And my Ma says she's no hat check girl nor manicure what has to get a tip of maybe two or three cents. She's willing to pay adollar for a dollars' worth every time, and if stores that give real money's worth do have a sale then she knows she's getting a right down reduction. She says she's satisfied with what she buys at Chas. F. Hauck & Co. for she can depend on being what she's expected and that she ain't going to go gallivantin' around to no store man what cuts prices a bit just to get her away from a good store and that's why my Ma She Takes No Tips.

Sonny Smiles





Goes After Odd Price Man.

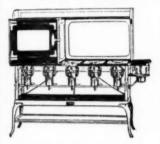
till, it cannot be considered good advertising.

Benjamin E. Watson, Well Known Stove Manufacturer, Passes on.

It is with sincere regret that we bring to the trade the information that Benjamin E. Watson, secretary-treasurer of the Scranton Stove Works, died on July 30th, at his home in Scranton, Pennsylvania.

Mr. Watson was for many years an associate of James Lansing, the president of the company, and while not as active in stove manufacturing organization works as Mr. Lansing, he was very well known and liked in the industry.

Don't Swelter in a Hot Kitchen This Summer



Come in and see the

New Process Lorain Equipped Coaloil Range

The stove that saves oil. The Gas Range's only rival.

The finest oil stove made. Fully guaranteed. Let us show you the New Process oil range.

Absolutely safe, simple to operate, no dangerous priming liquids needed.

Gives an intensely hot blue flame right at the cooking surface.

A gallon of oil operates a burner 18 to 30 hours.

Prices, \$9.60 to \$81.00

Approved by Good Housekeeping Institute

New Perfection and Nesco Perfect Oil Cookers Sold Here

Small Oil Stove Advertisement That Is Likely to Pull.

convention of the Ohio Sheet Metal Contractors' Association, which was held in Columbus a short time ago as you know, Mr. Hauck operates a big sheet metal working department

Business Sentiment Continues to Improve Due to Stimulus of Constructive Events.

Non-Ferrous Metal Prices Strong as Sterling Favors Metals — Copper Products at New High Level.

S LOW improvement in the steel and automobile industries is noted in the midweek reviews. The steel industry is operating at about 50 per cent of capacity, compared with 40 per cent six weeks ago. New orders are about equal to current deliveries.

"The course of the trade still indicates a measurable increase from week to week in output of rolled products," the *Iron Age* says. "Expectations of further improvement at the mills are based on a rebound from inadequate replacement buying in June and July rather than on any new developments in important consuming lines.

"The week has brought no marked change in prices, although buyers are not persuaded that the low point has been reached. The volume of new construction work appears to be falling off."

The trend toward business expansion, though not general, is distinct, gains made in July, which marked the turning point in several basic lines, have been extended in certain instances and the strengthening of confidence is an important phase.

A swift boom in business conditions at the beginning of the year had too great a reaction and there followed a slight depression. But this depression has turned upon itself and a forecast made in the mid-year bulletin on industrial and economic conditions in the United States just issued by the National Industrial Conference Board, 247 Park Avenue, shows that prices have become firmer and says business this fall generally will be good.

Copper

The tone of the copper market has been easier than it was for some weeks past. This condition was due ostensibly to lower prices in Europe and recessions in the prices of sterling. Producers were asking 13.62½ cents for Electrolytic, delivered, for shipment up to and including October.

Buyers, however, were more reserved, except when concessions were offered.

Tin.

There was a reaction of 3/8 cents in the tin market this week.

Sales of Straits tin were made Wednesday, August 13, both prompt and futures, at 51.50 cents. Late in the day, however, the price went to 51.62 cents for all positions.

Sterling exchange, which touched \$4.57 on Monday of this week for prompt cables, reacted to \$4.535%. The sterling market is in an erratic condition, but the general opinion, both here and abroad, seems to be that the recent recovery will be maintained and may extend even further.

Zinc.

There has been a somewhat improved amount of domestic consuming inquiry for zinc this week, chiefly for early shipment.

September and October have also been inquired for, but buyers are mostly hesitant on futures which are held at a small premium above the August price.

Prompt and August Prime Western are quoted at 6.17½ cents, though some sales are reported at 6.20 cents. The tone is firm without any assistance from operators' bids, the chief influence continuing to be the foreign market.

Lead.

Demand from lead consumers continues active. Producers report that the amount of August shipment being called for is especially remarkable, considering the amount of early shipment already booked in the last three weeks. Futures are

also in demand, but fixed prices on these are at present difficult to obtain, even at a premium.

St. Louis quotations for prompt are: 7.62½ to 7.75 cents; August, same; September, 7.70 to 7.80 cents. **Solder.**

Chicago warehouse prices on solder are as follows: Warranted, 50-50, \$32.00; Commercial, 45-55, \$31.25, and Plumbers', \$30.00, all per 100 pounds.

Wire and Nails.

Improved sentiment in wire and wire products has removed some of the discouragement recently apparent. While plain wire being placed is not indicative of the better tone, producers are booking good business. No firm determination is encountered to solicit plain wire business below 2.60 cents, base Pittsburgh, although in one or two instances a connection was found which would sell at 2.55 cents.

Demand for wire nails is better. Producers are quoting 2.85 cents per pound, base Pittsburgh, although one or two sales are heard at 2.80 cents, Pittsburgh.

Bolts and Nuts.

Although demand for bolts and nuts still is on the mend, prices generally are somewhat spotty. The more attractive business is the subject of sharp competition and 70 off still is being done on large machine bolts. On smaller business the tendency is to stand on 60 and 20 off.

Orders from Detroit automobile interests have not increased appreciably, but implement makers are more active.

Tin Plate.

The tin plate industry continues to operate at about 50 per cent of full estimated capacity, as it has been doing since early in July as it will probably continue doing the remainder of this month.

The various independent plants are not operating at precisely the same rate, and one or two large plants vary their operations considerably in alternate weeks. Then there is the point that tonnage outputs are below the average in the summer, being correspondingly above when the weather is mild or cool. Finally there is the disturbing element of the manufacture of tin mill black at tin plate plants, product which is not tinned. It engages hot mills but is not tinned. The proportion of this business to tin plate varies.

The tin plate market is alike quiet and firm. It is an open question which of these two adjectives should come first, i. e., whether the market is quiet because it is firm, or firm because it is quiet. An inquiry from a domestic buyer for 100,000 boxes would clarify the situation.

When the incident was over one of three things would have occurred. If the inquiry were withdrawn because nobody would shade \$5.50 the market would be plainly marked as being quiet because firm. If the order were placed at \$5.50 it would leave the market firm, but not quiet, if the inquiry were withdrawn because \$5.50 would not be shaded it would leave the market quiet.

Sheets.

Buying of sheets has been increasing continuously, although slowly for several weeks. The turning point probably occurred in the first week or two of July, but the change then was barely perceptible. By this time the increase amounts to something and the sheet market is clearly decidedly more active than 30 to 45 days ago.

Most of the increase, which is not large in point of tonnage anyhow, is to be attributed to increased industrial activity or consumption of sheets.

There is also developed a disposition on the part of a few buyers to replenish stocks in anticipation of better business later.

Recently galvanized sheets were quoted at the flat price of 4.60 cents, there being so much business done at this one figure that it did not seem necessary to quote a range.

Some business is done, in exceptional cases, at under 4.60 cents, but this is the general market, and the change represented the development of some steadiness in galvanized sheets.

Now, a similar steadiness can be reported in black sheets, which may be quoted at the flat price of 3.50 cents, against 3.50 cents to 3.60 cents hitherto quoted. In both cases of course, the steadiness comes at the expense of sacrificing the higher prices mills were sometimes obtaining. Sales below 3.50 cents are exceptional.

In blue annealed sheets a range still exists, 2.60 cents to 2.70 cents.

Independents seem to be doing 2.60 cents more often than higher prices, while 2.70 cents is the regular price of the leading interest, though it is possible this price has been shaded in some exceptional cases.

Old Metals.

Wholesale quotations in the Chicago district, which should be considered as nominal, are as follows: Old steel axles, \$17.00 to \$17.50; old iron axles, \$24.00 to \$24.50; steel springs, \$18.50 to \$19.00; No. 1 wrought iron, \$13.50 to \$14.00; No. 1 cast, \$16.00 to \$16.50, all per net tons. Prices for non-ferrous metals are quoted as follows, per pound: Light copper, 8 cents; light brass, 5 cents; lead, 5 cents; zinc, $3\frac{1}{4}$ cents, and cast aluminum, $14\frac{1}{2}$ cents.

Pig Iron Prices Are Firmer—Third and Fourth Quarter Delivery Demand Increases.

No. 2 Foundry Iron at Chicago Advanced to \$20.50—Stock Piles of Iron Are Being Reduced.

STEADINESS marks the improvement in pig iron demand. Prices are firm in all market districts with the exception of Birmingham and Cincinnati. No. 2 foundry and malleable have advanced to \$20.50 at Chicago and the restoration of silicon differentials is resulting in higher quotations on iron from Buffalo furnaces. Foundry iron at less than \$19 has practically disappeared in northern markets.

Shipments are exceeding output and stock piles are being reduced. Interest in the basic market is reviving, one Pittsburgh district consumer asking for 12,000 tons. Buffalo furnaces have inquiries aggregating 20,000 tons of basic.

The eastern foundry iron market is more active with inquiries involving 20,000 to 25,000 tons current in New York territory. The iron is wanted for third and fourth quarter delivery. Sales in the lake region fell off slightly from the total of the previous week, but prices are firmer and shipments and inquiries

are in better volume. Some large users have closed for their thirdquarter needs. Indications are strong that automobile builders will come into the market September 1.

The market report of Rogers, Brown & Company says:

"There is a better tone to the pig iron market, and, while buying for the most part continues on a restricted basis, producers find more grounds for encouragement and feel that they are drawing closer to better times.

"The east is still the chief source of optimism. Reports of heavier foundry melt come in from several directions and shipments are better.

Some difficulty has been experienced in securing the exact analyses required, the Buffalo and New York districts especially noticing a growing scarcity of the higher silicon foundry grades."

Before we run out of "weeks," why not have an "honest-week's-work-week"?

Chicago Warehouse Prices on Hardware and Metals.

AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing Western Hardware and Metal prices corrected weekly.

METALS	HARDWARE, SHEET	Carriage. BOLTS.	Damper. CLIPS.
PIG IRON.	METAL SUPPLIES,	Small, roll thread50-10-5% Small and Large cut	Acme, with tail pieces, per doz
Thicago Foundry \$20 50	WARM AIR FURNACE	thread50-5%	Non Rivet tail pieces, per doz
outhern Fdy. No. 24 01 to 24 51	FITTINGS AND ACCES-	Machine.	
coal	SUDIES	Small, roll thread60-5% Small, cut thread50-10-5%	COPPERS—Soldering,
		Stove	Pointed Roofing. 3 lb. and heavierper lb.
FIRST QUALITY BRIGHT TIN PLATES.	ADZES.		2 1b
C 20x28 112 sheets 25 80	Coopers'. Barton's	BRACES, RATCHET.	178 10
X 20x28 27 25 XX 20x28 56 sheets 15 35		V. & B. No. 444, 8 in\$4 54 V. & B. No. 222, 8 in 8 89	
XXX 20x28 16 45 XXXX 20x28 17 55	AMMUNITION.	V. & B. No. 111, 8 in 3 55	CORD.
	Shells, Loaded, Peters. Loaded with Black Powder 18%	V. & B. No. 11, 8 in 3 02	No. 7 Std. per doz. banks\$10 No. 8
TERNE PLATES	Loaded with Smokeless	BRUSHES.	
C 20x28, 40-lb. 112 sheets \$25 10 X 20x28, 40-lb. " " 28 00	Powder18% Winchester.	Hot Air Pipe Cleaning.	CORNICE BRAKES. Chicago Steel Bending.
C 20x28, 30-lb. " " 21 30	Smokeless Repeater	Bristle, with handle, each \$9 85	Nos. 1 to 6B1
C 20x28, 30-1b. " 21 30 X 20x28, 30-1b. " 24 20 C 20x28, 25-1b. " 20 30 X 20x28, 25-1b. " 23 20 C 20x28, 20-1b. " 17 80 V 20x28, 20-1b. " 20 65 C 20x28, 15-1b. " 16 55 C 20x28, 12-1b. " 15 25 C 20x28, 12-1b.	Smokeless Leader	Flue Cleaning. Steel Only, each\$1 25	COUPLING HOSE.
X 20x28, 25-lb. " " 23 20 C 20x28, 20-lb. " " 17 80			Brassper dez. \$2
V 20x28, 20-lb. " 20 65 C 20x28, 15-lb. " " 16 55	U. M. C.	BURRS.	CUT-OFFS.
	Arrow	Copper Burrs only40-10%	Kuehn's Korrekt Kutoffs:
C 20x28, 8-lb. " " 13 55	New Club	BUTTS.	Galv., plain, round or cor. Standard gauge4
COKE PLATES.	Gun Wads—per 1000. Winchester 7-8 gauge 10&71/2 %	Steel, antique copper or dull	26 gauge1
okes, 80 lbs., base, 20x28.\$12 70 okes, 90 lbs., base, 20x28, 12 95	" 9-10 gauge 10&7 ½ % " 11-28 gauge 10&7 ½ %	brass finish—case lots—	
okes, 90 lbs., base, 20x28. 12 95 okes, 100 lbs., base, 20x28. 13 25 okes, 107 lbs., base, IC		3½x3½—per dozen pairs \$3 66 4x4 " 4 92	DAMPERS. "Yankee" Hot Air.
20x28 13 60		Heavy Bevel steel inside sets, case lots—	7 inch each 90c doz 11
okes, 135 lbs., base, IX 20x28	Paper up to 1/166c per lb. Rollboard	per dozen sets 7 80	8 " " 25c, " 2
okes, 155 lbs., base, 56	Rollboard	Steel bit keyed front door sets, each 1 90	10 " " 32c, ' 3
sheets 8 80 okes, 175 lbs., base, 56	sq. ft. to roll)\$6.00 per roll	Wrought brass bit keyed	Smoke Pipe.
sheets 9 70 okes, 195 lbs., base, 56	AUGERS.	front door sets, each 3 25 Cylinder front door sets,	7 inch, each
sheets 10 65	Boring Machine40&10%	each 7 50	8 " " " " " " " " " " " " " " " " " " "
BLUE ANNEALED SHEETS.	Carpenter's Nut50%	CENTENT PURIL CE	12 " "
ase 10 gaper 100 lbs. 3 80	Hollow. Stearns, No. 4, doz\$11 50	CEMENT, FURNACE. American Seal, 5 lb. cans, net\$ 45	Reversible Check.
ONE PASS COLD ROLLED	Post Hole,	" 50-lb. cans, " 90 " 25 lb. cans, " 2 00	s inch, each
BLACK.	Iwan's Post Hole and Well 35% Vaughan's, 4 to 9 in\$15 60	Asbestos, 5 lb. cans, net 45	•
o. 18-20per 100 lbs. \$4 30 o. 22-24per 100 lbs. 4 35		Pecora per 100 lbs. 7 51	DIGGERS.
o. 26per 100 lbs. 4 40	AXES.	CHAINE	Post Hole. Iwan's Split Handle
To. 27per 100 lbs. 4 45 to. 28per 100 lbs. 4 50	First Quality, Single Bitted (unhandled), 3 to	% in. proof coil chain, per	(Eureka)
To. 29 per 100 lbs. 4 60	4 lb., per doz\$14 00 Good Quality, Single	100 lbs	4-ft. Handleper doz. \$14 7-ft. Handleper doz. \$6
GALVANIZED.	Bitted, same weight, per doz 13 00	American con cham to a 10 70	Iwan's Hercules pattern, per doz
To. 16per 100 lbs. \$4 75 To. 18-20per 100 lbs. 4 90		CHIMNEY TOPS.	por trous
lo. 22-24per 100 lbs. 5 05	BARS, CROW.	Iwan's Complete Rev. & Vent	DRILLS.
o. 26per 100 lbs. 5 20 o. 27per 100 lbs. 5 35	Steel, 4 ft., 10 lb\$ 80 Steel, 5 ft., 18 lb	Iwan's Iron Mountain only35%	V. & B. Star, 12-inch Length. 4, 5/16 and %, each\$
o. 28per 100 lbs. 5 50 o. 30per 100 lbs. 6 00	Pinch Bars, 5 1/2 ft., 24 lb 1 60	Standard30 to 40%	%, each
		CHISELS.	1, each
BAR SOLDER.	BARS, WRECKING.	V. & B. No. 25, ¼ in., ea. \$0 26 V. & B. No. 25, % in., ea. 38	V. & B. Star, 18-inch Length.
50-50per 100 lbs. 32 00	V. & B. No. 12	V. & B. No. 25, % in., ea. 38	%, each
mmercial.	V. & P. No. 324 0 57	Diamond Point.	1, each
Plumbersper 100 lbs. 30 00	V. & B. No. 30 0 48 V. & B. No. 380 0 63	V. & B. No. 55, ¼ in 0 33 V. & B. No. 55, ¼ in 0 45	174, each
ZINC.	BITS.	Firmer Bevelled.	EAVES TROUGH.
Slabs 6 75	All Vaughan and Bushnell.	Round Nose. V. & B. No. 65, ¼ in 0 33	Milcor Galv. Crimpedge, crated75-
	Screw Driver, No. 30, each \$ 30	V. & B. No. 65, ¼ in 0 33 V. & B. No. 65, ¼ in 0 45	Gaiv. Crimpeuge, cratou
SHEET ZINC. sk lots, stock, 100 lbs 11 50	Reamer, No. 80, each 45 Reamer, No. 100, each 45 Countersink, No. 13, each 23 Countersink, Nos. 14-15, each 30	Cape. Socket Firmer.	ELBOWS—Conductor Pipe
ss than cask lots, 100 lbs. 11 75	Countersink, No. 13, each 23	V. & B. No. 50, % in 0 31 V. & B. No. 50, % in 0 62	Milcor Galv., plain or corrugated,
BRASS.	Countersink, Nos. 14-15, each 30	v. & B. No. 50, % 1n 0 62	round flat. Crimp, Std. gauge
eets, Chicago base18c	Wood. BLADES, SAW.	CHUCKS, DRILL,	26 Gauge
ll Base	Atkins 30-in.	Goodell's, for Goodell's Screw	Square Corrugated.
ire, base16%c	Nos 6 40 26 \$8 90 \$9 45 \$5 40	Drivers List less 35-40% Yankee, for Yankee Screw	
COPPER.	BLOCKS.	Drivers\$6 00	Milcor Standard gauge
eets. Chicago base19% c	Wooden45%	CLAMPS.	Portico Elbows.
bing, seamless, base22 1/2 c	Patent45%	Adjustable.	Standard Gauge Conductor P
ire, No. 9 & 10 B. & S. Ga.	BLOW TORCHES (See Firepots).	No. 100, Door (Stearns) doz\$22 00	
ire, No. 11, B. & S. Ga17c	BOARDS.	Carpenter's.	Not nested
LEAD.	Stove. Per Doz.	Steel BarList price plus 20%	ELBOWS-Stove Pipe.
nerican Pig 8 85	Crystal, 33"\$23 90 Wash,	Hose. Sherman's brass, %-inch	1-piece Corrugated. Unifor
ieet. 9 85	No. 760, Banner Globe	per doz	
Full Coilsper 100 lbs. 11 85 Cut Coilsper 100 lbs. 12 15	(single)per doz. \$5 25 No. 652, Banner Globe	Double, brass, %-inch, per doz 1 20	6-inch 7-inch
	(single)per doz. 6 75		Special Corresponded.
TIN. g Tinper 100 lbs. 55%c	No. 860, Single—Plain	CLINKER TONGS.	
Tinper 100 lbs. 59% c	Pump 6 25	Front Rank, each\$1 75 Per doz 18 00	7-inch